- 3. (Amended) The additive of claim 1 [or 2], wherein the polymer is a copolymer of styrene or a styrene derivative and maleic anhydride with alkylene oxide based side chains.
- 4. (Amended) The additives of [any one of claims 1 to 3]claim 1, wherein the polymer has a molecular weight of from 5000 g/mol to 100,000 g/mol.
- 5. (Amended) The additive of [any one of claim 1 to 4] <u>claim 1</u>, wherein the weight of the alkylene oxide based side chains is above 200 g/mol.
- 6. (Amended) The additive of [any one of claims 1 to 5] <u>claim 1</u>, wherein the number of alkoxylates in the polymer side chain is up to 60 units.
- 7. (Amended) The additive of [any one of claim 1 to 6] <u>claim 1</u>, wherein the polymer has the molecular structure:

wherein M in each occurrence independently is hydrogen or $-[CH_2\text{-}CHR\text{-}O]_n\text{-}CH_3$ with R being CH₃ or CH₂-CH₃ or hydrogen, with the proviso that at least some of the radicals M have the meaning of $-[CH_2\text{-}CHR\text{-}O]_n\text{-}CH_3$, n is from 3 to 70, [preferably greater than 4 and less than 60], and x and y each independently are from 1 to 100.

Please include claims 12-21, if not already present in the international application. Applicant's would like to bring to the Examiner's attention that claims 14, 15, 16, 17 and 18 have been amended below to remove the multiple, multiple dependencies present in the claims present in the international application.

1))

HOWREY
SIMON
ARNOLD
& WHITE LLP

International Application No.: PCT/GB99/02623
Confirmation No.: Not assigned
Applicant: SMITH, Carl S. et al.

Atty. Ref.: MIDR 704

12. A method of stabilizing shale in a subterranean formation comprising the step of injecting an additive into the formation comprising a polymer based on an olefinically unsaturated hydrocarbon with alkylene oxide based side chains.

- 13. The method of claim 12 wherein the polymer is a copolymer of an olefinically unsaturated hydrocarbon and an ethylenically unsaturated carboxylic acid, carboxylic acid salt or carboxylic acid anhydride with alkylene oxide based side chains.
- 14. (Amended) The method of claim 12 [or 13], wherein the polymer is a copolymer of styrene derivative and maleic anhydride with alkylene oxide based side chains.
- 15. (Amended) The method of [any one of claim 12 to 14] <u>claim 12</u>, wherein the polymer has a molecular weight of from 5000 g / mol to 100,000 g/mol.
- 16. (Amended) The method of [any one of claim 12 to 15] <u>claim 12</u>, wherein the weight of the alkylene oxide based side chains is above 200 g/mol.
- 17. (Amended) The method of [any one of claim 12 to 16] <u>claim 12</u>, wherein the number of alkoxylates in the polymer side chain is up to 60 units.
- 18. (Amended) The method of [any one of claims 12 to 17] <u>claim 12</u>, wherein the polymer has the molecular structure:

wherein M in each occurrence independently is hydrogen or $-[CH_2\text{-}CHR\text{-}O]_n\text{-}CH_3$ with R being CH₃ or CH₂-CH₃ or hydrogen, with the proviso that at least some of the radicals M have the meaning of $-[CH_2\text{-}CHR\text{-}O]_n\text{-}CH_3$, n is from 3 to 70, [preferably greater than 4 and less than 60,] and x and y each independently are from 1 to 100.

13